Fujitsu recommends Windows® 7.

Data Sheet
Fujitsu ESPRIMO P910 E90+ Desktop PC

The Expandable Business Workhorse

Fujitsu ESPRIMO P910 PCs give you the absolute highest PC manageability, performance and expandability. With the 92% efficient power supply, you'll also save on energy costs. The use of identical components within the family ensures perfect infrastructure compatibility. At retirement, Fujitsu's distinctive EraseDisk option wipes your data securely

Microtower
Maximum performance and optimal extendability
- Top-quality, high-value microtower, 7 drive bays, 4 PCI/PCI express interfaces

Green technology
Fujitsu's contribution to environmental protection for the continued existence of our planet
- Halogen-free printed circuit of mainboard and power supply, sophisticated product concept for the entire lifecycle

Energy efficiency coupled with intelligent performance
Low power consumption combined with top performance
- 3rd generation Intel® Core™ processor family, a switched monitor outlet and a power supply with up to 92% efficiency

System management
Simple system administration for complex IT infrastructures
- Intel® vPro™ technology (depending on processor) and Fujitsu DeskView manageability tools

Quiet
Pleasant working environment due to an extremely quiet system
- Innovative hardware design, optimized cooling concept ensures silent operations

Components

	Intel® vPro™ Logo with Intel® Core i5 and Core i7 processors *with Intel® Turbo Boost Technology (clock speed and will vary depending on workload and other variables)
Processor	Intel® Core™ i7-3770 processor (4 Cores / 8 Threads, up to 3.90 GHz 3.40 GHz, 8 MB, Intel® HD Graphics 4000 with 3rd generation Core i processors) *
	Intel® Core™ i5-3570 processor (4 Cores / 4 Threads, up to 3.80 GHz 3.40 GHz, 6 MB, Intel® HD Graphics 2500) *
	Intel® Core™ i5-3470 processor (4 Cores / 4 Threads, up to 3.60 GHz 3.20 GHz, 6 MB, Intel® HD Graphics 2500) *
	Intel® Core™ i3-2120 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2000)
	Intel® Pentium® processor G860 (2 Cores / 2 Threads, 3.00 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G640 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics)
	Intel® Celeron® processor G540 (2 Cores / 2 Threads, 2.50 GHz, 2 MB, Intel® HD Graphics)
Operating systems	
Operating system	Windows® 7 Home Basic (EM) 32-bit Windows® 7 Home Premium 64-bit Windows® 7 Professional 32-bit Windows® 7 Professional 64-bit
Operating system compatible	openSUSE Linux Windows® XP
Operating system notes	Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
Hard disk drives (internal)	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch
	SSD SATA III, 64 GB, 2.5-inch
	HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 250 GB, 3.5-inch
	HDD SATA II, 7200 rpm, 320 GB, 2.5-inch
	HDD SATA II, 7200 rpm, 160 GB, 2.5-inch
Hard disk notes	Up to 18 GB of HDD space is reserved for system recovery
Graphics add on cards (optional)	NVIDIA® Quadro® NVS 300, 512 MB
	NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB
	LFH59/ 2x DVI-I adapter cable
	LFH59/ 2x DP adapter cable
	DP to DVI-D (single link) Adapter Cable
	ATI Radeon® HD7350 1GB FH, 1 GB
	2nd NVIDIA® Quadro® NVS 300, 512 MB
Drives (optional)	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 20in1, USB 2.0, 3.5-Inch

Interface add on cards/components (optional)	
	WLAN III, 802.11g/Draft-n (Windows only)
	Parallel Interface
	Gigabit Ethernet PCIe x1, DS
	eSATA Interface
	Dual serial card PCIe x1, powered
	Dual serial card PCIe x1
Base unit	ESPRIMO P910 E90+
Mainboard	
Mainboard type	D3162
Formfactor	µATX
Chipset	Intel® Q77
Processor socket	LGA 1155
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	32 GB
Memory frequency	1600 MHz
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	10/100/1000 MBit/s Intel® 82579 LM
BIOS version	AMI Aptio 4.6
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
Audio codec	Conexant CX20642
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
I/O controller on board	
Serial ATA total	6
thereof SATA III	2
thereof eSATA	2 (optional)
Controller functions	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10 (Windows XP not supported) Intel® Smart Response Technology (depending on CPU)
Interfaces	
Audio: line-in	1
Audio: line-in / microphone	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	10
USB 3.0 total	4
USB front	4x 2.0 or 2x 2.0/ 2x 3.0
USB rear	6x 2.0 / 2x 3.0
USB internal	2
VGA	1 (via DVI to VGA adapter, part of shipment)
DisplayPort	1
DVI	1 (DVI-I)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)

Interfaces	
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
eSATA	1 (optional)
Interface Module notes	Anytime USB charge functionality
Input device / components	
	Optical USB wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse KBPC PX ECO Mouse M440 ECO
Drive bays	
Drive bays total	7
2.5-inch internal bays	1
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2
Slots	
PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm / 12.29 inch) Full height
PCI-Express x1	1 x (312 mm / 12.29 inch) Full height
PCI (32-bit / 33 MHz)	1 x (170 mm / 6.7 inch) Full height
Graphics on board	
Graphics brand name	Intel® HD Graphics, HD Graphics 2000, HD Graphics 2500, HD Graphics 4000 (depending on CPU)
Shared video memory	up to 1759 MB
TFT resolution (VGA)	1024 x 768 pixel 1280 x 1024 pixel 1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1600 x 1200 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DisplayPort)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
Graphics features	Dual display support DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.1 (depending on CPU) Open CL™ 1.1 (depending on CPU) For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows 7® only)

Graphics on board	
Graphics notes	Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz
Electrical values	
Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 88% / 92% / 91%
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	280 W
Power factor correction/active power	active
Monitor outlet	Switched
Power consumption	
Power consumption note	See white paper Energy Consumption
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=ea811ec7-ffe2-45b3-a6d4-326fa3aeccd5
Heat dissipation	
Heat dissipation notes	See white paper Energy Consumption
Noise emission	
Related Processors for noise	Core i5-3770
Standard noise emission	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
Standard noise notes / description	A weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))
Standard noise operation mode: CPU 50% load	3.6 B / 22 dB(A) Bystander; 26 dB(A) Operator position
Standard noise operation mode: HDD load	3.6 B / 23 dB(A) Bystander; 25 dB(A) Operator position
Standard noise operation mode: Idle mode	3.3 B / 19 dB(A) Bystander; 22 dB(A) Operator position
Standard noise operation mode: ODD load	4.6 B / 32 dB(A) Bystander; 37 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.4 B / 19 dB(A) Bystander; 22 dB(A) Operator position
Blue angel noise emission according certification	for max. possible configuration According to ISO 7779:2010, ECMA-74
Blue angel noise notes / description	A weighted sound power level Lwad (in B); 1B = 10dB Bystander position
Blue angel noise operation mode: HDD load	tbd
Blue angel noise operation mode: Idle mode	tbd
Blue angel noise operation mode: ODD load	tbd
Dimensions / Weight / Environmental	
Dimensions (W x D x H)	175 x 419 x 395 mm 6.89 x 16.5 x 15.56 inch
Operating position	Vertical
Weight	11 kg
Weight (lbs)	24.25 lbs
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35°C (50 - 95°F)

Compliance	
Product	ESPRIMO P910
Model	MI5W
Germany	TÜV GS
Europe	CE Nordic Swan in progress
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 (dedicated regions) EPEAT® Gold (dedicated regions)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/
Additional Software	
Additional software (preinstalled)	Nero Essentials S (burning software) Fujitsu Recovery (Hard Disk Based Recovery) Norton Internet Security (incl. Firewall) 60 days version Microsoft® Office Starter: reduced-functionality Word and Excel® only, with advertising. No PowerPoint® or Outlook®. Buy Office 2010 to use the full-featured software.
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 10 Essentials XL
Miscellaneous	
	Keyboard on (Special Fujitsu keyboard required) Thermal management Extended lifetime
Compatibility (references)	
	DMI 2.0 PC 2001 WMI 1.5 USB 2.0 SMBIOS
Manageability	
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT 8.0 (depending on CPU) WoL (Wake on LAN)
Manageability software	DeskView Client DeskView Instant BIOS Management DeskView Integration for Symantec Management Platform
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management
Manageability link	http://ts.fujitsu.com/manageability
Security	
System protection	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock

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Security	
Audit proof protection	EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces
Access protection	User and supervisor BIOS password Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader

Serviceability	
	EasyFix EasyChange for HDD EasyChange for optical drives

Packaging information	
Packaging dimension (mm)	516 x 278 x 562 mm
Packaging dimension (inch)	20.31 x 10.94 x 22.13 inch
Max. quantity / pallet	28
Material - Weight (g) Carton	1405 g
Material - Weight (lbs) Carton	3.1 lbs
Material - Weight (g) EPS / PS	160 g
Material - Weight (lbs) EPS / PS	0.35 lbs
Material - Weight (g) PE	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	printed user documentation is bleached in chlorine free process

Warranty	
Standard Warranty	3 years
Service level	Bring-In / On-Site Service (depending on country)
Maintenance and Support Services - the perfect extension	
Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	http://www.fujitsu.com/fts/services/support/index.html

More information

Fujitsu platform solutions

In addition to Fujitsu ESPRIMO P910 E90+, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures
With the Fujitsu Dynamic Infrastructures approach,Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructureas-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu ESPRIMO P910 E90+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts/ESPRIMO

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to resolve issues of environmental energy efficiency through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

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